

**ABSTRACT**

In one embodiment, a digital signal processor includes look ahead logic to decrease the number of bubbles inserted in the processing pipeline. The processor receives data containing instructions in a plurality of buffers and decodes the size of a first instruction. The beginning of a second instruction is determined based on the size of the first instruction. The size of the second instruction is decoded and the processor determines whether loading the second instruction will deplete one of the plurality of buffers.

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